American Free Trade League in 1881. The degree of LL.D. was granted him by Williams College in 1871, and by Harvard University in 1890. In 1874 Oxford gave him the degree of D.C.L.

As he was an easy and rapid producer, a complete list of Mr. Wells' writings would be long. It must also be remembered that in his early years his bent was strongly toward science. He invented a machine for folding sheets to be used with the power printing press. Not only was he the author of the well-known *Science of Common Things*, but also of a series of scientific text-books, the one on chemistry having been adopted at West Point. Of his economic work, the most important and characteristic are, the *Reports of the Special Commissioner of Internal Revenue* (1866–1869), *Our Merchant Marine* (1882), *The Primer of Tariff Reform* (1884), *Principles of Taxation* (1886), and *Recent Economic Changes* (1889). It is no derogation to a writer who came on the scene before drastic training in economics was possible or required, to say that in some respects his work lacked scientific quality and depth. In his *Recent Economic Changes*, one of the most effective books of its kind, he was led astray by the over-production fallacy, although that lapse had little to do with the real value of the volume.

To his friends he was ever the open-hearted, ruggedly honest, high-minded and genial companion, always burning with zeal for the really important reforms of the day, always a fountain of interesting and exact knowledge, always helpful and sympathetic. He was persistent, painstaking, indefatigable in his hunt for facts. Whatever he lacked in systematic training was overbalanced by his practical instinct and good sense. In reality, he was a great statistician, and his mind had no bent for vague abstractions or for speculative discussions. It was his closeness to the facts of everyday life which gave him so great an influence with men. American economists can ill afford to lose so honest, so strong, so loyal an elder brother from their ranks. L.

THE development of railway statistics in the United States, especially during the past decade has brought us to a point where the relations between the roads and the public are clearly shown. Statistics of operations set forth in great detail the work done and the pay received for doing it. The capitalization reports show the amount and kinds of stock and bonds and the dividends and interest paid.

Perhaps an analysis of the holdings of its stocks and bonds is more than the railway should be required to give. The railway manager has always been slow to take the public into his confidence, and, although he may now be willing to show fully the relation of the road to the public in general, he may see grave reasons for not informing us how the stock and bonds are held. If the securities are owned in small blocks by great numbers of people along the line, probably no objection to publishing this fact would be made. Or even if the holders do not reside along the line but have invested small savings in the stock of the road so that adverse legislation or anything that lowers the revenue hurts a large number of honest investors, the railway man is not averse to having this fact published and emphasized. If, on the contrary, the owners are great capitalists residing in the East, or worse yet, in Europe, experience has shown that knowledge of this fact does not make the position of the manager any easier in dealing with his local constituency. So, if the securities are held abroad or in large blocks, we may expect this fact to be concealed from the general public as much as possible.

To the economic student much data, helpful in the solution of problems outside the transportation field, would be furnished by statistics showing where and in what quantities railway securities are held. In studying foreign exchange and international values, definite information about the interest and dividends paid to foreigners is greatly desired. Problems of distribution, accumulation of capital, effect of the rate of interest upon accumulation, and kindred topics might be made much more definite by such data as the railways could furnish.

We have full returns carefully tabulated by the Interstate Commerce Commission to show just how far formal consolidation of railways has been carried, but no data available show to what extent virtual consolidation has been accomplished by accumulations of stock in the hands of a few individuals.

For these and other reasons we hail with joy that paragraph in the last report of the Illinois Central Railway which furnishes information as to the ownership of its stock. Information about the ownership of bonds would be even more thankfully received. In the case of the Illinois Central the difference would not be marked, for its stock has long been an investment security. But for many of the railways of this country a list of the stockholders would show who are the speculators rather than who are the capitalists or investors.

Although the Illinois Central in its report does not give all of the information desired, it does show the number of shareholders, their average holdings, their grouping as large or small holders and their location in so far as they are Americans or foreigners, employees or residents of the states through which the road passes.

Of the 6381 shareholders 3365, a little over one-half are in the United States, 2869 in Great Britain and 120 elsewhere. One-third of the United States stockholders live in the states along the line and 733 of them are employees of the company, whose average holding is only 3.5 shares. Foreigners hold more than one-half of the Illinois Central stock, their average holding being 75.5 shares to 70.5 for American holders.

All told, the books show 8 holdings of 5000 shares, or over; 51 of 1000 shares, or over; 80 of 500 shares, or over; 681 of less than 500, but more than 100 shares; 391 of exactly 100 shares each, and 5170 of less than 100 shares. The number of stockholders registered on the books is 6381. Barely one-eighth of them own over 100 shares apiece.[1]

If we take the 820 holdings above 100 shares at the minimum, *i. e.*, 51 at 1000, etc., they average nearly 300 shares each, and leave an average of 52 shares each for 5561 small holders. If we assume that they average at the middle point between the dividing numbers, *i. e.*, 51 at 3000, the halfway point between 1000 and 5000, etc., they give an average of over 500 shares to each of the large stockholders and leave an average of about 20 shares in each small holding. At the lowest calculation 820 men own almost half the stock. Calculating at the mean point they hold nearly four-fifths.

For the year ending June 30, 1898, the Illinois Central paid to foreign stockholders $1,436,175 in dividends. If the report showed what part of the bonds are held by foreigners, and if other railroads would give us the same data we should know more nearly how much our annual exports must exceed our imports. It is fair to suppose that the proportion of bonds of American railways in foreign hands is greater than the percentage of stocks which they own, and that the payment to them on interest account exceeds the dividends they draw. If we take the stock of the Illinois Central as a basis on which to apportion between natives and foreigners, the dividends paid by United States railways, the foreigners can draw 50 million dollars of

[1] *Report* of the Illinois Central Railroad Company for 1898. p. 7.

bills on us which will not be represented by imports entered at our custom house. On the same basis 100 million dollars more would be due them as interest on railway bonds. Naturally, conjectures of this kind are of extremely small value, but if the other roads would follow the good example of the Illinois Central we should not be compelled to draw conclusions from such meager data.

SUGAR IMPORTATIONS AND REVENUES.

THE recent war with Spain has given a severe blow to the so-called "sugar-bounty" countries. Among these Germany stands pre-eminent. For several years the government of the "fatherland" has encouraged the manufacture of sugar from beets. Germany relied upon the United States, to some degree, for the sale of her sugar product. In 1897 the importations to this market of German beet sugar amounted to 1511.4 million pounds, which, through the Dingley Bill, were reduced to 138 million pounds in the year ending June 30, 1898. The demand in this country is said to be about four and a half billion pounds. This amount can be supplied by Cuba and Porto Rico when the results of peace and new methods make themselves felt in the island industry.

As the table below indicates, Germany was shipping into the United States in 1896 more than 14 per cent. of the amount and value of imported sugar.[1] The proportion of trade belonging to Hawaii was somewhat less, but the share of the islands was much larger than in the early part of the nineties. It is reasonable to suppose that the sugar from Cuba and Porto Rico will now be admitted free of duty into the United States. If this happens the entire market of the United States will be supplied by these islands and the sale of German sugar in this country will virtually cease. Germany may look to a possible demand for her product in England, but the increased supply of

[1] SUGAR IMPORTS, 1896.

	Pounds	Value
Germany,	525,991,757	$12,528,755
France,	34,810,370	859,359
Belgium,	72,721,826	1,771,980
West Indies,	1,523,362,109	33,281,361
Hawaii,	352,175,269	11,336,796
	3,896,338,557	$89,219,713

—*Commerce and Navigation of the United States*, 1896, vol. i. p. 44.